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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

10/779,537

02/14/2004

Bao Tran

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01/25/2008

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ART UNIT

PAPER NUMBER

2167

MAIL DATE

DELIVERY MODE

01/25/2008

PAPER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

**MAILED**

Application Number: 10/779,537  
Filing Date: February 14, 2004  
Appellant(s): TRAN, BAO

**JAN 25 2008**

**Technology Center 2100**

Bao Tran (reg. 37,955 )  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 11/2/07 appealing from the Office action mailed 10/19/2006.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

Application/Control Number:  
10/779,537  
Art Unit: 2167

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|             |                 |         |
|-------------|-----------------|---------|
| 20030004936 | Grune et. al.   | 01-2003 |
| 6339767     | Rivette et. al. | 01-2002 |

Munzner, Tamera. "H3: Laying Out Large Directed Graphs in 3D Hyperbolic Space". October 20-21 1997. Proceedings of 1997 IEEE Symposium on Information Visualization. pp. 2-10.

### **(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-7, 11-12, and 16-17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune).

#### **Claim 1:**

**A computer-implemented method for mapping intellectual property**[Grune, 0010, search and map patents.], comprising:

**Searching** (searching) **one or more remote databases** (databases) **for one or more relevant patents** [Grune, 0027, allows a user to enter a query via a client computer that is connected to a server on a global area network. Intelligent searching also provides a user access to the stored intellectual property and scientific information contained on various databases.];  
**and**

**performing a network analysis** (map) **on the relevant patents** [Grune, [0048] that the program can be used to map patent citations or patent claims in hyperbolic tree formats] **and displaying one or more patents** (intellectual property)[Grune, [0048] The program allows for simultaneous modeling of the valuation and intellectual property results. The results may be displayed in various graphical formats.].

**Claim 4:**

**The method of claim 1, further comprising clusterizing** (grouping/indexing) **patents according to word** (subject/noun/verb/adjective) **similarity** (related/according to/ synonym) [Grune, 0011, intelligent searching engine will access and retrieve information from the databases of knowledge management, valuation, IP, and technology literature. After information related to query is retrieved, data is sent to SIPS-VSM's utilities. One of the utilities will group results according to subject, publication date, assignee, etc. Knowledge management utility enables users to find solutions to problems by semantically analyzing documents by breaking sentences into noun-verb-adjective trees and then applying such tools as synonym indexes.].

**Claim 5:**

**The method of claim 1, further comprising generating a visualization of the patents (visual results) for display on a screen (screen) or plotting on a large format plotter [Grune, 0060, visual results are displayed in split or full-screen format.].**

**Claim 6:**

**The method of claim 1, further comprising three-dimensionally visualizing the patents on a 3D display device [Grune, 0010, model the results of the query in such a way that a user may display and/or map (by an audio/visual means in two or three dimensions). Must be able to display in 3D if visual means is displayed in 3D.].**

**Claim 7:**

**The method of claim 1, further comprising allowing a user to review (review) the search result and revise the query (refine query) [Grune, 0023, allows user to review information and extracted pertinent information. Grune 0014, refine query.].**

**Claim 11:**

**The method of claim 1, further comprising distributing a search over a plurality of client computers [Grune, figure 5, user utilizes a computer (client) to connect to internet which connects to a client which connects to a server. A plurality of client computers are used.].**

**Claim 12:**

**The method of claim 11, wherein one of the client computers is located behind a firewall (security procedure), further comprising bypassing the firewall in sending distributed search results to a remote computer** [Grune, 0015, the client computer will use security procedures to prevent users from inappropriately gaining information from the server computer. 0013, the system allows user to search by submitting a query and providing search results to user. Hence must bypass security in order to send back results to user.].

**Claim 16:**

A system for mapping intellectual property, comprising:

**means for Searching (searching) one or more remote databases (databases) for one or more relevant patents** [Grune, 0027, allows a user to enter a query via a client computer that is connected to a server on a global area network. Intelligent searching also provides a user access to the stored intellectual property and scientific information contained on various databases.];  
**and**

**means for performing a network analysis (map) on the relevant patents** [Grune, [0048] that the program can be used to map patent citations or patent claims in hyperbolic tree formats] **and displaying one or more patents (intellectual property)**[Grune, [0048] The program allows for simultaneous modeling of the valuation and intellectual property results. The results may be displayed in various graphical formats.].

**Claim 17:**

**The system of claim 16, further comprising means for generating a computer-readable intellectual property mapping file (resulting file) [Grune, 0048, maps patent citations into hyperbolic formats. 0014, resulting file.].**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 14-15, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune) as applied to claim **1, 4-7, 11-12, and 16-17** above, and further in view of U.S. Patent Application Publication 2004/0123235 by Yeh et. al. (hereafter Yeh).

**Claim 2:**

The method of claim 1, further comprising



Grune discloses, **receiving as a query one or more keywords (keywords) or assignees to be searched** [Grune, 0030, searches may include but not limited to keywords, inventor, current assignee, etc.];

**searching the query in Issued Patent or Published Application databases** (intellectual property databases) [Grune, 0028, access stored intellectual property and scientific information contained in the various databases.];

Grune does not explicitly disclose **retrieving cited prior art patents for each patent found in search results**. On the other hand, Yeh discloses, [0038], a citation analysis module is used to generate citation information of a designated patent according to patent summary information stored in the patent information table. That is, cited patents are retrieved. Grune and Yeh are relate to patent database manipulation. It would have been obvious to have modified Grune to have included the step of **retrieving cited prior art patents for each patent found in search results** based on the disclosure of Yeh. A skilled artisan would have been motivated to do so for the purpose of assisting the user to analyze development trends and directions of technologies.

Grune modified with Yeh discloses **updating the query by adding assignees from the cited prior art patents and running a second search using the updated query**. Grune discloses that after information related to query is retrieved, data is sent to SIPS-VSM's utilities [0011].

Which further filters the results of the query such as grouping a result according to subject,

publication date, assignee (adding assignee), etc. Grune further discloses, 0015, refined query (updated query), running a search again (repeating using updated query).

**Claim 14:**

**A computer-implemented method for mapping intellectual property, comprising:**

**(a) receiving as a query one or more keywords (keywords) or assignees to be searched** [Grune, 0030, searches may include but not limited to keywords, inventors, current assignees, etc.];

**(b) searching the query in Issued Patent or Published Application** (intellectual property) **databases** (databases) [0028, access stored intellectual property and scientific information contained in the various databases.];

Grune does not explicitly disclose **(c) retrieving cited prior art for each patent found as search results**. On the other hand, Yeh, 0038, a citation analysis module is used to generate citation information of a designated patent according to patent summary information stored in the patent information table. That is, cited patents are retrieved. Both inventions are related to patent database manipulation. It would have been obvious to have modified Grune to have included the step **of retrieving cited prior art patents for each patent found in search results** based on the disclosure of Yeh. A skilled artisan would have been motivated to do so for the purpose of assisting the user to analyze development trends and directions of technologies.];

Grune in combination with Yeh discloses

**(d) updating the query by adding assignees from the cited prior art;**

**(e) iteratively repeating (b)-(d) using the updated query; and**

**(f) displaying the intellectual property.**

Grune discloses that after information related to query is retrieved, data is sent to SIPS-VSM's utilities [0011]. Which further filters the results of the query such as grouping a result according to subject, publication date, assignee (adding assignee), etc. Grune further discloses, 0015, refined query (updated query), running a search again (repeating using updated query). Grune further discloses [0048] The program allows for simultaneous modeling of the valuation and intellectual property (intellectual property) results. The results may be displayed (display) in various graphical formats.

**Claim 15:**

**The method of claim 14, further comprising network analyzing (map) the search results (results)[Grune, 0048, intellectual property results and map patent citations. ].**

**Claim 18:**

The system of claim 17, wherein the IP mapping file comprises:

Grune in combination with Yeh discloses **a collection of patent documents, each having one or more links embedded in the first portion referencing one or more external documents viewable using a viewer application; and one or more links embedded in the third portion referencing information contained in the second portion; and links generated by a network analysis of relationships among the patent documents.** Yeh discloses a 0045 a patent citation tree generated in accordance with data stored in the patent information table (referencing

external documents). The citation analyzing module generates citation links among a plurality of patents according to the summary data stored in the patent information table (one or more links embedded in the third portion referencing information contained in second portion). The link generating module generates sub-node links between the nodes, and adds sub-node links to the node data structure. Each sub-node link represents one or more citation links, and connects one node with its respective one or more nodes. Yeh further discloses, 0048, that the node link structures are displayed in hyperbolic plane in the display unit (viewer application). Grune discloses [0048] that the program can be used to map patent citations or patent claims in hyperbolic tree formats (links generated by a network analysis relationship among patents).

**Claim 19:**

A computer readable media, executable by a processor, containing executable computer program instructions comprising:

**Code to receive as a query one or more keywords (keywords) or assignees to be searched**[Grune, 0030, searches may include but not limited to keywords, inventors, current assignees, etc.];

**Code to search the query in an issued Patent or Published Application databases** (intellectual property) **databases** (databases) [0028, access stored intellectual property and scientific information contained in the various databases.];

Grune does not explicitly disclose **Code to retrieve cited prior art patents for each patent found in search results**. On the other hand, Yeh, 0038, a citation analysis module is

used to generate citation information of a designated patent according to patent summary information stored in the patent information table. That is, cited patents are retrieved. Both inventions are related to patent database manipulation. It would have been obvious to have modified Grune to have included the step **to retrieve cited prior art patents for each patent found in search results** based on the disclosure of Yeh. A skilled artisan would have been motivated to do so for the purpose of assisting the user to analyze development trends and directions of technologies.];

Grune in combination with Yeh discloses

**Code to update the query by adding assignees from the cited prior art patents;**

***Code to run a second search using the updated query; and***

**Code to perform a network analysis on a search results and to display the search result.**

Grune discloses that after information related to query is retrieved, data is sent to SIPS-VSM's utilities [0011]. Which further filters the results of the query such as grouping a result according to subject, publication date, assignee (adding assignee), etc. Grune further discloses, 0015, refined query (updated query), running a search again (repeating using updated query). Grune, [0048] that the program can be used to map (network analysis) patent citations or patent claims in hyperbolic tree formats. Grune further discloses [0048] The program allows for simultaneous modeling of the valuation and intellectual property (intellectual property) results. The results may be displayed (display) in various graphical formats.

**Claim 20:**

**The media of claim 19, further comprising instructions to distribute the processing over a plurality of computers** [Grune, Figure 5 illustrates plurality of computers. Namely a client and server.].

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune) as applied to claim 1, 4-7, 11-12, and 16-17 above, and further in view of "H3: Laying Out Large Directed Graphs in 3D Hyperbolic Space" by Tamara Munzner (hereafter Munzner)

**Claim 3:**

The method of claim 1, further comprising:

Grune does not explicitly disclose **for each patent, creating spring relationship among patents based on number of citation of patent prior art; and generating a spring mass diagram.** On the other hand, Munzner, page 6, discloses iterative force-directed placement systems that models (generates) nodes and links as a mass-spring system (spring mass/spring relationship between nodes), where nodes repulse each other but links exert an attractive force. Further disclosing that while these iterative systems do well with relatively small graphs they have difficulty converging when the number of nodes (based on number of nodes) scales from hundreds to thousands. Grune and Munzner both disclose a system to visualize data. It would have been obvious to one of ordinary skill at the time the invention was made to have modified

Grune to have included the step of **for each patent, creating spring relationship among patents based on number of citation of patent prior art; and generating a spring mass diagram** based on the disclosure of Munzner. A skilled artisan would have been motivated to do so for the purpose of visualizing data.

**Claims 8-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication 2003/0004936 by Grune et. al. (hereafter Grune) as applied to claim 1, 4-7, 11-12, and 16-17 above, and further in view of U.S. Patent 6339767 by Rivette et. al. (hereafter Rivette).**

**Claim 8:**

**The method of claim 1, further comprising caching results from prior IP maps in a remote computer**

Grune does not explicitly disclose caching results from prior IP maps in a remote computer alone. However Grune does disclose 0014 that the system displays the results in the resulting files in an audio/visual format, and the user may save or print the result files generated by the query (results of IP maps). On the other hand Rivette, c. 55 l. 30-55 discloses a caching subsystem that caches/retrieves cached patent data (caching IP data in a remote computer).

Both Grune and Rivette disclose a system involving patent display systems. It would have been obvious to one of ordinary skill at the time the invention was made to have included the step of caching results from prior IP maps in a remote computer based on the disclosure of Rivette. One of ordinary skill in the art would have been motivated to do so for the purpose of quickly accessing frequently used data.

**Claim 9:**

**The method of claim 8, further comprising retrieving (retrieval) a cached IP map in response to a user request (request) [Rivette, c.54 l. 17, retrieval request is sent to cached subsystem]**

**Claim 10:**

As to claim 10, Grune discloses **IP maps and fresh IP maps** [Grune, 0014, user is able to create new search, thus a new map.].

Grune however does not explicitly disclose **periodically flushing cached data to ensure a fresh data**.

Rivette on the other hand, disclosed col. 53 line 28-29, caching only takes place in network client 306. In col. 54 line 12-14, in other embodiments, the client 304, 306 discards unused data received from the enterprises server 314 in order to make room for additional data. Accordingly, **cache flushing** (discarding data) is suggested by Rivette.

Both Grune and Rivette disclose a system involving patent display systems. It would have been obvious to one of ordinary skill at the time the invention was made to have applied Rivette's disclosure of discarding unused data to Grune's system for the purpose of making room for additional and more frequently used data to be utilized. Accordingly, one of ordinary skill in the



art would have been motivated to do so for the purpose of quickly accessing frequently used and updated data.

**Claim 13:**

Grune does not explicitly disclose **further comprising annotating a patent at a local computer and caching the annotated patent at a remote computer to satisfy a subsequent request for said patent** alone. However, Rivette discloses c.2 l.44-56, annotating (annotating) patents and importing and exporting patents. Further disclosing as in claim 18, retrieving a request for patent data through the use of a cache subsystem (caching,/request). It would have been obvious to one of ordinary skill at the time the invention was made to have included the step of **annotating a patent at a local computer and caching the annotated patent at a remote computer to satisfy a subsequent request for said patent** based on the disclosure of Rivette. One of ordinary skill in the art would have been motivated to do so for the purpose of quickly accessing frequently used data and to provide the user a method of reminding / analyzing a patent.

**(10) Response to Argument**

**Appellant asserts the following (lettered):**

**A. Claims 1, 4-7, 11-12, and 16-17 are not anticipated by Grune because Grune fails to show the claimed network analysis, which involves the application of network theory or graph theory to form relationships between patents. That instead, Grune relates to display of the result. (page 5-6).**

*In regards to Appellant assertions based on specifications that a network analysis can generate sociograms (network diagrams) to visualize networks being analyzed. And further that the embodiments of network analysis are discussed in 20-24 of the specifications.*

*Appellant's page 22 line 16-20, states that in one embodiment, overview diagrams are used to supply a user with knowledge about the organization of the complete network, (2) a means for navigating the network, (3) orientation within the complete network. Further, page 23 line 1-2, stating that techniques such as hyperbolic trees can be used to visualize relationship among patents.*

*Grune discloses 0048, that the program can be used to map patent citation or patent claims in hyperbolic tree formats.*

*Accordingly, in response, the examiner respectfully disagrees with Appellant that the limitation "performing a network analysis on the relevant patents and displaying one or more patents" is not disclosed by Grune.*

*As stated in the rejection performing a network analysis (map) on the relevant patents [Grune, [0048] that the program can be used to map patent citations or patent claims in hyperbolic tree formats] and displaying one or more patents (intellectual property)[Grune,*

*[0048] The program allows for simultaneous modeling of the valuation and intellectual property results. The results may be displayed in various graphical formats.] is suggested.*

*The rejection is clear in stating that the network analysis is done by mapping patent citations. Furthermore Grune indicates, 0003, that analysis of patent information by mapping or clustering allows a user to understand how a group of patents or claims are related. This analysis by mapping is clearly shown in 0048, stating that the program can be used to map patent citations or patent's claims in hyperbolic tree format. A single patent or claim is at the center of the hyperbolic tree and related claims or patents are the branches connected to the root center.*

*Accordingly, appellant's definition of network analysis is clearly met, as Grune essentially discloses generating a sociogram (e.g. hyperbolic tree) to visualize networks being analyzed (e.g. relation between patent data).*

*On page 7, Appellant offers no real argument that mapping is not a network analysis. Instead, Appellant asserts that Grune discloses displaying of graphical format, similar to a display operation. However this is ignoring the fact that an analysis through mapping patent citations or patent claims is done in order to display a proper hyperbolic tree.*

*Accordingly, the assertions rendered by Appellant are unpersuasive to the examiner. The rejection should therefore be sustained.*

**B. Grune fails to anticipate the dependent claims 4, 5, 6, 11, 12, 16, 17.**

*In regards to claim 4, Appellant asserts that Grune's breaking sentences into noun-verb-adjective trees and then applying such tools synonym indexes is not the same as clustering patents to word similarity.*

*As stated in the rejection, SIPS-VSM utilities allow for grouping results according to subject, publication, data, assignee, etc. Accordingly, Grune discloses clustering (grouping) patents according to word similarity (according to subject). It is reasonable to infer that subjects, would be words in this case.*

*Further, while the Knowledge management utility enable users to find solutions to problems by semantically analyzing documents by breaking sentences into noun-verb adjective trees and then applying such tools as synonym indexes. The Knowledge management further, 0033, allows users to submit a document in a query form and ask Activeknowledge to find other documents on similar topics in databases and on the internet. Autonomy's technology analyzes the frequency of character strings (e.g. words) in documents that if finds to determine which strings address the same topic as the submitted document. Accordingly, clustering patents (find other documents on similar topics) according to word similarity (character strings) could further be suggested in this context.*

*Accordingly the rejection should be sustained. As first, appellant's claim is broad enough to read on several interpretations. And second, that Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.*

*In regards to claim 5 appellant asserts since Grune's split screen/full screen format is not the same as plotting on a large format plotter. The rejection is fatally deficient on this specific point.*

*In response, the examiner disagrees that claim 5 is not suggested. The claim states generating a visualization of the patents for display on a screen OR plotting on a large format plotter. Grune discloses 0060, visual results are optionally displayed in split screen or full screen format...The windows may include lists, hyperbolic trees, landscape maps, electronic images of patents, and summaries and citations of scientific information. Accordingly, generating a visualization (visualize) of patents (patent) for display on a screen (screen) or plotting on a large format plotter is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 5 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference. The rejection should therefore be sustained.*

*In regards to claim 6 appellant asserts that Grune paragraph 10's audio/visual means in no way discloses or teaches the specifics of three-dimensionally visualizing the patents on a 3d display device.*

*In response, the examiner respectfully disagrees. All that is required by the claim is to three-dimensionally visualizing the patents on a 3-d display device. 0010, discloses that there is a need for a user-friendly web-based tool that allows user to input queries in plain-language and can search and map patents while simultaneously valuing those patents. Then further in 0010*

*stating provides that user may display and/or map (by an audio/visual means in two or three dimensions) solutions to such queries from; patents contained within specific evolving intellectual property databases, technological publications contained within evolving scientific and engineering databases, and evolving knowledge management based systems. Further providing in 0045, visual mapping of information in 2-d and 3-d format is demonstrated...the present invention utilizes the same or similar technique to distinguish IP values on a topological map such as provided by Aurigins's landscape. Accordingly, three-dimensionally visualizing the patents (IP values/ intellectual property) on 3-D display device (3-D) is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 6 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 11, Grune figure 5 shows an internet connected computer, but fails to show that the search work being distributed over a plurality of client computer (peer-to-peer (P2P) distribution of search load over a number of client computers). That Grune completely fails to show the peer to peer specifics and the rejection is fatally deficient.*

*In response, the examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., p2p) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Finally, in regards to actual claimed limitation "comprising distributing a search over a*

*plurality of client computers." In figure 5 and in particular 0015, it states that the user must connect to the client computer via the internet. 0015 further stating that commands from the client computer will dispatch to the server computer which executes the intelligent search engine.*

*Accordingly, the user must utilize some personal computer (e.g. client) to even get the internet and connect to the client computer. Accordingly, there must be multiple clients the user must use to submit the search request to the server. Therefore, further comprising distributing a search (search) over a plurality of client computers (client computer/user connect to client via internet) is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 11 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 12, Grune fails to show the peer to peer or p2p distribution of search load, and further where the client computer is behind a firewall.*

*In response, the examiner respectfully disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., p2p) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Finally, in regards to the actual claimed limitations of wherein one of the client computers is*

*located behind a firewall, further comprising bypassing the firewall in sending distributed search results to a remote computer is suggested by Grune. As Grune discloses 0015, the client computer will use security procedures to prevent users from inappropriately gaining information from the server computer. And 0013, that the system allows user to search by submitting a query and providing search results to user. Accordingly, wherein one of the client computers is located behind a firewall (client computer will use security procedure), further comprising bypassing the firewall in sending distributed search results (providing search results to a user) to a remote computer (user) is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 12 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 16, Grune fails to anticipate this claim since it does not show the means for performing network analysis in paragraph 48 as discussed above.*

*In response, please see above claim 1.*

*In regards to claim 17, Grune paragraph 48 fails to show the means for generating a computer readable intellectual property mapping file as discussed above.*

*In response, the means for generating a computer readable intellectual mapping file is not defined in the specification. Grune 0014 states that SIPS-VSM searches databases, identifies the relevant information to the query, and displays and values the results in the resulting files in*



*an audio visual format. The user may save or print the results files generated from the query. 0048, disclose the display results that map patent citations or patent claims in hyperbolic tree format. Accordingly, generating a computer-readable intellectual property mapping (map patent citations) file (result file) is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 17 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

**C. Claims 2, 14-15, and 18-20 are patentable over Grune and Yeh.**

*In regards to claim 2, Appellant asserts that Grune does not disclose a network analysis. Grune and Yeh do not show the network analysis and fails to show the specifics recited in claim 2 of receiving as a query one or more keywords or assignees to be searched; searching the query in issued patent or published patent application databases; retrieving cited prior art patents for each patent found in search results; updating the query by adding assignees from the cited prior art patents; and running a second search using the updated query.*

*In response, the examiner respectfully disagrees. As to the network analysis, please see above remarks to claim 1. As to the limitations of claim 2, claim 2 recites receiving as a query one or more keywords or assignees to be searched; searching the query in issued patent or published application databases; retrieving cited prior art patents for each patent found in search results; updating the query by adding assignees from the cited prior art patents; and running a second search using the updated query. Grune and Yeh disclose in Grune 0030,*

*searches may include but not limited to keywords, inventor, current assignee. Accordingly, receiving as a query one or more keywords (keywords) or assignees (assignee) to be searched (search) is suggested. Grune and Yeh further disclose in Grune, 0028, access stored intellectual property and scientific information contained in the various databases. Accordingly, searching the query (access) in issued patent (intellectual property) or published application databases (databases) is suggested. Grune and Yeh further discloses in Yeh, 0038, a citation analysis module is used to generate citation information of a designated patent according to patent summary information stored in the patent information table. 0036, the data downloading module downloads patents from the IP information websites via internet in accordance with the patent downloading queries. Accordingly, retrieving cited prior art patents (generate citation information) for each patent (designated patent) found in search results (downloaded patents) is suggested. Finally, as to updating the query by adding assignees from the cited prior art patents and running a second search using the updated queries. Grune and Yeh disclose in Grune that after the information related to a query is retrieved, data is sent to SIPS-VSM's utilities [0011]. Which further filters the results of the query such as grouping a result according to subject, publication, assignee, etc. 0030, further states searches may include but not limited to keyword, inventor, patent-shoe number, field of search, data of patent, cited reference, current assignee, field of technology, or solutions to scientific or engineering problems. Grune further discloses 0014, if the user chooses to enter a new query, the user is returned to the beginning of the process. if the user chooses to refine his search, the user will enter a new query. The results from the redefined query are a subset of the previous query's results. Again the user may save or print the results of the resulting files. After refining a search, the user may begin a new search,*

*refine the search again or exit. Accordingly, the last limitation updating a query (refined query) by adding assignees from the cited prior art patents (assignees) and running a second search using the updated query (refined search) is suggested.*

*Therefore, appellant's assertions directed towards claim 2 are unpersuasive over the cited art as each limitation is suggested by the cited references. The rejection should therefore be sustained.*

*In regards to claim 14, Grune and Yeh fail to disclose the specific combination of:*

- (a) receiving as a query one or more keywords or assignees to be searched;*
- (b) searching the query in Issued Patent or Published Application databases;*
- (c) retrieving cited prior art for each patent found as search results;*
- (d) updating the query by adding assignees from the cited prior art;*
- (e) iteratively repeating (b) – (d) using the updated query.*

*In response, the examiner respectfully disagrees. Grune and Yeh discloses in Grune, 0030, searches may include but not limited to keyword, inventor, patent-shoe-number, field of search, date of patent, cited reference, current assignee, field of technology, or solutions of scientific or engineering problems. Accordingly, (a) receiving as a query one or more keywords (keyword) or assignees (assignee) to be searched (search) is suggested. Grune and Yeh disclose in Grune 0028, access stored intellectual property and scientific information contained in the various databases. Accordingly, (b) searching the query in issued patent (Intellectual Property) or published application databases (databases) is suggested. Grune and Yeh further disclose in Yeh, 0038, a citation analysis module is used to generate citation information of a designated*

*patent according to patent summary information stored in the patent information table. 0036, the data downloading module downloads patents from the IP information websites via internet in accordance with the patent downloading queries. Accordingly, retrieving cited prior art patents (generate citation information) for each patent (designated patent) found in search results (downloaded patents) is suggested.*

*In regards to Yeh only shows citation information and does not show that cited patents are retrieved. In response, the examiner disagrees. Yeh, 0038, a citation analysis module is used to generate citation information of a designated patent according to patent summary information stored in the patent information table. 0036, the data downloading module downloads patents from the IP information websites via internet in accordance with the patent downloading queries. Accordingly, retrieving cited prior art patents (generate citation information) for each patent (designated patent) found in search results (downloaded patents) is suggested. Yeh further discloses, that the patent information table figure 410, contains the cited and cited by patents as seen on figure 5A. Accordingly, the cited prior art patents are retrieved from table 410.*

*Further, applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).*

*Grune further discloses 0048, a single patent or claim is at the center of the hyperbolic tree and related claims or patents are the branches connected to the root. Accordingly patents and patent citation must be retrieved in order to be displayed by the Grune reference.*

*In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See In re McLaughlin, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).*

*Furthermore, Grune and Yeh disclose in Grune, 0030 searches may include but are not limited to keyword, inventor, patent-shoe number, field of search, date of patent, cited reference, current assignee, field of technology, or solutions to scientific or engineering problems. Grune further discloses 0014, if the user chooses to enter a new query, the user is returned to the beginning of the process. if the user chooses to refine his search, the user will enter a new query. The results from the redefined query are a subset of the previous query's results. Again the user may save or print the results of the resulting files. After refining a search, the user may begin a new search, refine the search again or exit. Accordingly, (d) updating the query (redefined query) by adding the assignee from the cited prior art (assignee) is suggested by the combination of Grune and Yeh. Grune and Yeh further disclose iteratively repeating (b)-(d) using the updated query (refine the search again). And lastly, Grune and Yeh further disclose in Grune 0048, the program allows for simultaneous modeling of the valuation and intellectual property results. The results may be displayed in various graphical formats. Accordingly, (f) displaying (display) the intellectual property (intellectual property) is suggested.*

*In regards to, Appellant's assertion directed to failing to show how automatically performs updating the query by adding assignees from the cited prior art and iteratively repeating b-d using the updated query. First, Automatically is not being claimed. Second, it has been held that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over prior art. See MPEP 2144.04 section III, in re Venner, 262 F.2d 91, 95; 120 USPQ 193, 194 (CCPA 1958).). As to the limitation, please see above paragraph as it has been discussed.*

*For the reasons above, Appellant's assertions directed towards claim 14 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited references. The rejection should therefore be sustained.*

*In regards to claim 15, Claim 15 states further comprising network analyzing the search results. Please see above remarks directed towards network analyzing. Secondly, in regards to PDF patent document. There is no recitation of a PDF patent document even remotely mentioned in any of the claims.*

*For the reasons above, Appellant's assertions directed towards claim 15 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 18, Appellant makes no real argument towards claim 18. However, for the sake of clarity Yeh discloses the recited limitations of claim 18, wherein the ip mapping file (Figure 5C, XML document corresponding to figure 5B) comprises: a collection of patent*

*documents (Figure 5B, patent nodes), each having one or more links (Figure 5B, citation links) embedded in the first portion (figure 5B, element 521) referencing one or more external documents viewable using a viewer application (figure 5D, illustration of the patent citation tree of figure 5B); and one or more links embedded in the third portion (Figure 5B, nodes on the far right side) referencing information contained in the second portion (Figure 5B, nodes 522-524); and links generated by a network analysis of relationships among the patent documents (0038, citation analysis). Accordingly, claim 18 is clearly suggested by Yeh and appellant's assertions are unpersuasive over the cited reference.*

*For the reasons above, Appellant's assertions directed towards claim 18 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 19, Appellant asserts similar rational as claim 14. Thus, please see above claim 14.*

*In regards to claim 20, that peer to peer distributed processing for example is not shown. In response, to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., peer to peer) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Secondly, even if it was figure 5 suggests the limitation. As discussed above in claim 11.*

*For the reasons above, Appellant's assertions directed towards claim 20 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

**D. Claim 3 is patentable over Grune and Munzner.**

*In regards to claim 3, Munzer fails to show creating spring relationship among patents based on number of citation of patent prior art; and generating a spring mass diagram.*

*In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Grune discloses "relationship among patents based on a number of patent prior art" as seen in 0048, a single patent or claim is at the center of the hyperbolic tree and related claims or patents are the branches connected to the root center. Accordingly, relationship among patents (patent is at the center) and patent prior art (related patents are the branches connected to root). Grune essentially discloses Patents as nodes in a diagram. Grune does not explicitly disclose creating a spring relationship; and generating a spring mass diagram. On the other hand, Munzner, page 6 discloses iterative force-directed placement systems that model nodes and links as a mass-spring system, where nodes repulse each other but links exert an attractive force. Further disclosing that while these*



*iterative systems do well with relatively small graphs they have difficulty converging when the number of nodes scales from hundreds to thousands.*

*Accordingly, the combination of Grune and Munzer disclose for each patent (Grune, Patent as root), creating spring relationship (Munzer, number of nodes) among patents based on number of citation of patent prior art (Grune, related patent); and generating a spring mass diagram (Munzer, mass spring system). It would have been obvious to one of an ordinary skill in the art at the time the invention was made to have modified Grune to have included the step of creating spring relationship based on number of nodes; and generating a spring mass diagram based on the disclosure of Munzner. A skilled artisan would have been motivated to do so for the purpose of visualizing the data in a different manner other than a hyperberbolic tree. Essentially the claim is directed to a method of design choice in which to represent the patent data. Where the instead of generic nodes used in Munzer, the nodes could be patent nodes as suggested by Grune in which to visualize data.*

*For the reasons above, Appellant's assertions directed towards claim 3 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

**E. Claims 8-10 and 13 are patentable over Grune and Rivette.**

*In regards to claim 8, Grune and Rivette fail to show caching at a remote client computer.*

*In response, the examiner respectfully disagrees that Grune and Rivette fail to show caching at a remote client computer. Grune discloses 0014, the system displays results in the resulting files in an audio/visual format, and the user may save or print the result files generated by the query (results of IP maps). Rivette disclosed col. 55 lines 30-55, disclosing a caching subsystem that caches/retrieves cached patent data (caching IP data in a remote computer.) Both Grune and Rivette disclose a subsystem involving patent display systems. Accordingly, caching (cache) at a remote client computer (subsystem) is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 8 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 9, Grune and Rivette fail to show retrieving a cache IP map from remote client computer in response to a user request.*

*In response to claim 9, Rivette disclosed retrieval request is sent to cached subsystem. Accordingly, retrieving a cached IP map (cached patent data) in response to a user request (request) is suggested.*

*For the reasons above, Appellant's assertions directed towards claim 9 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 10 Grune and Rivette fails to mention cache flushing at all.*

*In response, as noted in col. 53 line 28-29 of Rivette, caching only takes place on the network client 306. In col. 54 lines 12-14, in other embodiments, the client 304, 306 discards unused data received from the enterprises server 314 in order to make room for additional data. Accordingly, cache flushing (e.g. discarding data) is suggested by Rivette.*

*For the reasons above, Appellant's assertions directed towards claim 10 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

*In regards to claim 13, Grune and Rivette fail to show the combination of annotating a patent at a local computer and caching the annotated patent at a remote computer to satisfy subsequent request for the patent.*

*In response, the examiner respectfully disagrees. Rivette discloses col. 2 lines 51-52, annotate the case and the patents in the case, import and export the patents and the cases. Rivette discloses col. 2 lines 54-55, that the above is incorporated herein by reference. Further disclosing, a cache subsystem identifies from data retrieval request the patent and the portions of the patent that are requested, col. 54 lines 18-20. Accordingly, annotating a patent at a local computer (annotate the case and the patents) and caching the annotated patent at a remote computer to satisfy subsequent request for the patent (importing and export the patents and the cases) is suggested. In other words, if it is imported, it is stored and thus cached.*

*For the reasons above, Appellant's assertions directed towards claim 13 are unpersuasive to the examiner over the cited art as each limitation is suggested by the cited reference(s). The rejection should therefore be sustained.*

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



Michael D. Pham

Examiner


Art Unit 2167

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